

REMARKS

This is a full and timely response to the outstanding non-final Office Action mailed July 5, 2002. In the Office Action, claims 1 – 9 remain pending and stand rejected. Claims 1 – 9 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over the combination of Mohammed (U.S. Patent No. 5,894,479) with Winter et al. (U.S. Patent No. 4,814,972). Applicants have revised claims 1 - 9 to further clarify the language of the claims. In addition, new claims 10 - 32 have been added in this second response with amendments and remarks. Applicants believe that the claims are patentable over the combination of Mohammed and Winter et al. Thus, Applicants respectfully traverse these rejections under 35 U.S.C. § 103(a) and request reconsideration and allowance of the pending claims.

Rejections Under 35 U.S.C. § 103(a)

Revised independent claim 1 specifies “logic to authorize the subscriber to access a first communications path by comparing first identification information with at least part of the at least one database” and “logic to authorize the subscriber to access a second communications path by comparing second identification information with at least part of the at least one database”. Applicants submit that Mohammed and Winter et al. as well as the combination of Mohammed and Winter et al. do not suggest, disclose, or teach both “logic to authorize the subscriber to access a first communications path by comparing first identification information with at least part of the at least one database” and “logic to authorize the subscriber to access a second communications path by comparing second identification information with at least part of the at least one database” as recited in Applicants’ independent claim 1. To the contrary Mohammed is concerned with “allow[ing] a client communicating with a server using separate upstream and downstream devices to designate one or more devices as the devices to receive [downstream] data from the server.” (Mohammed col. 1, lines 9 - 12) The log-in process of Mohammed only has to do with logging into the POP (Point of Presence) or POTS

(Plain Old Telephone Service) server over an analog modem using a user id and password. (See col. 6, lines 20 - 39 of Mohammed.) Mohammed does not control access to the RF cable communications downstream link. Instead Mohammed states that:

The problem with using separate devices for upstream and downstream data transfers is that the upstream device and the downstream device will both have a different IP address as there is the assignment of an IP address to the upstream device (i.e., the analog modem or ISDN device) in addition to the IP address already assigned to the cable modem. The problem involves the headend server, which, in response to data requests generated by the upstream device, will transfer downstream data to the upstream device. This is because the headend server will look-up the MAC address corresponding to the IP address of the requesting device in the ARP table and, finding that the MAC address belongs to the upstream device, the headend server will send the requested data to the upstream device as it is the IP address from which the request came.

For example, where the upstream device is an analog modem (dialing into a POTS server), and the downstream device is a cable modem, the client PC will have two IP addresses--one having been statically assigned to the cable modem, the other being assigned to the analog modem. Immediately after the client initiates a connection with the headend server via the POTS server, the client will be sent a "MAC-request" packet requesting IP and MAC address information. In response, the client will send a "MAC-reply" packet which will contain the client's IP and MAC address information. The POTS server will forward this information to the headend server, which will update its ARP table. Thereafter, when the client requests data from the headend server, the headend server will respond to the request by looking up the MAC address to which to send the requested data. However, as the lookup will be done by using the IP address of the ANALOG modem (i.e., the client PC's upstream device), the MAC address returned will be the MAC address of the analog modem. The headend server will thus select the analog modem instead of the cable modem as the receiving device, thereby undesirably transmitting downstream data to the analog modem, which is the slower connection.

(Col. 2, line 43 - col. 3, line 13 of Mohammed) Thus, Mohammed is concerned with changing the downstream routing of data for the IP address associated with the analog modem. However, the downstream routing of data for the IP address associated with the cable modem is not affected by the processes of Mohammed. Furthermore, the log-in of Mohammed only relates to a single log-in into the POTS or POP server. Mohammed

does not disclose, teach, or suggest an additional authorization of access to the downstream cable connection. Thus, Mohammed does not disclose, teach or suggest both “logic to authorize the subscriber to access a first communications path by comparing first identification information with at least part of the at least one database” and “logic to authorize the subscriber to access a second communications path by comparing second identification information with at least part of the at least one database” as recited in Applicants’ independent claim 1. In addition, dependent claims 2 - 13, which depend on claim 1 are also allowable over Mohammed in view of Winter et al. because dependent claims 2 - 13 contain all the limitations of independent claim 1 from which they depend.

With respect to newly added independent claim 14, the claim recites the steps of “authorizing the subscriber to access the first communications path by comparing first identification information with at least part of at least one database” and “authorizing the subscriber to access the second communications path by comparing second identification information with at least part of the at least one database.” Applicants submit that Mohammed, Winter et al., and the combination of Mohammed in view of Winter et al. do not disclose, teach, or suggest the steps of “authorizing . . . access [to a] first communications path” and “authorizing . . . access [to a] second communications path” as recited in newly added independent claim 14. Thus, newly added independent claim 14 is patentable over the combination of Mohammed in view of Winter et al. Furthermore, dependent claims 15 - 20, which depend on claim 14, contain all the limitations of independent claim 14. Thus, dependent claims 15 - 20 are also patentable over the combination of Mohammed in view of Winter.

Moreover, independent claim 21 recites “logic configured to authorize the subscriber to access the cable data network at the first level of service” and further recites “logic configured to authorize the subscriber to access the cable data network at the second level of service”. Mohammed, Winter et al., and the combination of Mohammed and Winter et al. do not disclose, teach, or suggest the limitations from independent claim 21. Therefore, independent claim 21 is patentable over Mohammed in view of Winter. In addition, dependent claims 22 - 24 contain all the limitations of independent claim 21. Thus, dependent claims 22 - 24 also are patentable over Mohammed in view of Winter.

Also, independent claim 25 recites “authorizing the subscriber to access the cable data network at the first level of service” and “authorizing the subscriber to access the cable data network at the second level of service”. Mohammed, Winter et al. , and the combination of Mohammed and Winter et al. do not disclose, teach, or suggest the limitations from independent claim 25. Therefore, independent claim 25 is patentable over Mohammed in view of Winter. In addition, dependent claims 26 - 28 contain all the limitations of independent claim 25. Thus, dependent claims 26 - 28 also are patentable over Mohammed in view of Winter.

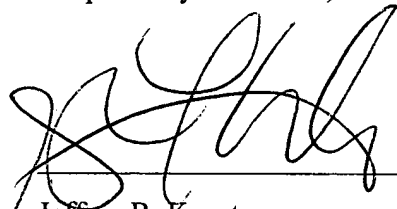
Furthermore, independent claim 29 recites “logging into the cable data network at a first level of service” and “logging into the cable data network at a second level of service”. Mohammed, Winter et al. , and the combination of Mohammed and Winter et al. do not disclose, teach, or suggest the limitations from independent claim 29. Therefore, independent claim 29 is patentable over Mohammed in view of Winter. In addition, dependent claims 30 - 32 contain all the limitations of independent claim 29. Thus, dependent claims 30 - 32 also are patentable over Mohammed in view of Winter.

Accordingly, based at least upon the previous arguments, Applicants submit that independent claims 1, 14, 21, 25, and 29 as well as dependent claims 2 – 9, 15 - 20, 22 - 24, 26 - 28, and 30 - 32 are allowable over the combination of Mohammed (U.S. Patent No. 5,894,479) and Winter et al. (U.S. Patent No. 4,814,972).

CONCLUSION

For at least the reasons set forth above, Applicants respectfully submit that all objections and/or rejections have been traversed, rendered moot, and/or accommodated, and that the now pending claims 1 - 32 are in condition for allowance. Favorable reconsideration and allowance of the present application and all pending claims are hereby courteously requested. If, in the opinion of the Examiner, a telephone conference would expedite the examination of this matter, the Examiner is invited to call the undersigned attorney at (770) 933-9500.

Respectfully submitted,



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ANNOTATED VERSION OF MODIFIED CLAIMS TO SHOW CHANGES MADE

In accordance with 37 C.F.R. § 1.121, please find below the amended claims in which the inserted language is underlined (“ ”) and the deleted language is enclosed in brackets (“[]”):

1. (Once Amended) In a cable data delivery network for delivering digital data to a host location upon a subscriber initiated request, apparatus for authenticating that the subscriber is authorized to use said network, said apparatus comprising:

a network manager including at least one database of authorized users and

a validation agent, said validation agent further comprising:

logic to authorize the subscriber to access a first communications path by comparing first identification information with at least part of the at least one database, the first communications path providing at least a portion of connectivity between the host location and a head end of the cable data delivery network; and

logic to authorize the subscriber to access a second communications path by comparing second identification information with at least part of the at least one database, the second communications path providing at least a portion of connectivity between

the host location and the head end of the cable data
delivery network.

[said host location including a telephone dial up device for the subscriber to log onto said network and connect to said network manager using said identification information, wherein said validation agent authorizes the subscriber to use said network in accordance with a comparison of said identification information to said authorized users in said database.]

2. (Once Amended) The apparatus of claim 1, wherein said first identification information includes a subscriber USERID.
3. (Once Amended) The apparatus of claim 2, wherein said first identification information further includes a subscriber password.
4. (Once Amended) The apparatus of claim 3, wherein said at least one database includes an associated USERID and password for each of said authorized users.
5. (Once Amended) The apparatus of claim 4, wherein said validation agent authorizes said subscriber to use said [network] first communications path in accordance with a comparison of said subscriber USERID and said subscriber password to USERIDS and passwords stored in said at least one database.

6. (Once Amended) The apparatus of claim 5, wherein said host location includes a dial up device that further includes a cable data receiver for receiving said digital data.
7. (Once Amended) The apparatus of claim 6, wherein said [call] dial up device is uniquely identified[y] by an electronic identifying number, and wherein said second identification information includes the electronic identifying number.
8. (Once Amended) The apparatus of claim 7, wherein said at least one database further includes authorized identifying numbers for each of a plurality of dial up devices including said dial up device[s].
9. (Once Amended) The apparatus of claim 8, wherein said validation agent authorizes said [call] dial up device to receive said digital data over the second communications path in accordance with a comparison of said identifying number of said call up device with said identifying numbers stored in said at least one database.
10. (Newly Added) The apparatus of claim 1, wherein the first communications path is a public switched telephone network (PSTN) link.
11. (Newly Added) The apparatus of claim 1, wherein the first communications path is bi-directional.

12. (Newly Added) The apparatus of claim 1, wherein the second communications path is a radio frequency (RF) cable link.
13. (Newly Added) The apparatus of claim 1, wherein the second communications path is uni-directional.
14. (Newly Added) A method of authorizing a subscriber to access a first communications path and a second communications path, the first communications path and the second communications path utilized in conveying data between a head end and the subscriber of a cable data network, the method comprising the steps of:
- authorizing the subscriber to access the first communications path by
 - comparing first identification information with at least part of at
 - least one database; and
 - authorizing the subscriber to access the second communications path by
 - comparing second identification information with at least part of
 - the at least one database.
15. (Newly Added) The method of claim 14, wherein the first identification information comprises a USERID and a password.

16. (Newly Added) The method of claim 14, wherein the second identification information comprises an electronic identifying number.
17. (Newly Added) The method of claim 14, wherein the first communications path is a public switched telephone network (PSTN) link.
18. (Newly Added) The method of claim 14, wherein the first communications path is bi-directional.
19. (Newly Added) The method of claim 14, wherein the second communications path is a radio frequency (RF) cable link.
20. (Newly Added) The method of claim 14, wherein the second communications path is uni-directional.
21. (Newly Added) An apparatus utilized in authorizing a subscriber to access a cable data network at a first level of service and a second level of service, the cable data network providing connectivity between a head end and the subscriber, the method comprising the steps of:
 - logic configured to authorize the subscriber to access the cable data network at the first level of service by comparing first identification information with at least part of at least one database;
 - and

logic configured to authorize the subscriber to access the cable data network at the second level of service by comparing second identification information with at least part of the at least one database.

22. (Newly Added) The apparatus of claim 21, wherein the first level of service is at a higher data rate than the second level of service.

23. (Newly Added) The apparatus of claim 22, wherein the first level of service operates over a bi-directional public switched telephone network (PSTN) link.

24. (Newly Added) The apparatus of claim 22, wherein the second level of service operates over a radio frequency (RF) cable link.

25. (Newly Added) A method of authorizing a subscriber to access a cable data network at a first level of service and a second level of service, the cable data network providing connectivity between a head end and the subscriber, the method comprising the steps of:

authorizing the subscriber to access the cable data network at the first level of service by comparing first identification information with at least part of at least one database; and

authorizing the subscriber to access the cable data network at the second level of service by comparing second identification information

with at least part of the at least one database.

26. (Newly Added) The method of claim 25, wherein the first level of service is at a higher data rate than the second level of service.
27. (Newly Added) The method of claim 26, wherein the first level of service operates over a bi-directional public switched telephone network (PSTN) link.
28. (Newly Added) The method of claim 26, wherein the second level of service operates over a radio frequency (RF) cable link.
29. (Newly Added) A method of claim logging into a cable data network that has a plurality of levels of service, the method comprising the steps of:
 - logging into the cable data network at a first level of service by sending first identification information to at least one validation agent; and
 - logging into the cable data network at a second level of service by sending second identification information to at least one validation agent.
30. (Newly Added) The method of claim 29, wherein the first level of service is at a higher data rate than the second level of service.
31. (Newly Added) The method of claim 30, wherein the first level of service operates over a bi-directional public switched telephone network (PSTN) link.

32. (Newly Added) The method of claim 30, wherein the second level of service operates over a radio frequency (RF) cable link.